REMARKS

This is in full and timely response to the above-identified Office Action. Reexamination and reconsideration in light of the proposed amendments and the following remarks, are respectfully requested.

The Drawings

The drawings have been corrected as noted above. The corrections as indicated *supra* are incorporated into the formal drawings which are submitted with this response.

Rejection under 35 USC § 103

The rejection of claims 9, 12-14 under 35 USC § 103(a) as being unpatentable over Sakakura et al. (US 5,625,795) in view of Papenberg et al. (US 5,379,415), is respectfully traversed.

The present application addresses the problem of accessing a single external memory by a number of distributed computers. In particular, the present application addresses the problem of accessing such a memory with low latency, and additionally, how to add high availability to the external shared memory.

Sakakura et al., on the other hand, present not a shared memory system, but a duplicated distributed memory system - where a number of distributed hosts each have a distributed shared memory component INTERNAL to each host, and wherein changes made by a host to its own internal distributed shared memory components are automatically propagated to the distributed shared memories of the other hosts. (See for example, column 2, lines 58-59, column 10, lines 21-23 and column 6, lines 8-19).

Thus, Sakakura et al. do not disclose a single fault tolerant external memory unit which each host may transparently access via an access device connected thereto. In fact, each host in Sakakura et al. only access the distributed shared memory component INTERNAL to the host, and no EXTERNAL access (other than the automated propagation of changed data) is made by the host.

In order to establish a *prima facie* case of obviousness, it is necessary to show that the hypothetical person of ordinary skill would, without any knowledge of the claimed subject matter and without any inventive activity, be able to arrive at the claimed

subject matter given the guidance of the cited references when each is fully considered as statutorily required.

It is accordingly submitted that Sakakura et al. would not lead the hypothetical person of ordinary skill in the direction necessary for arriving at the claimed subject matter. Indeed, the rejection acknowledges that Sakakura et al. do not teach the access device being connected to a fault tolerant external memory and to overcome this admitted shortcoming cites Papenberg et al. as "disclosing" a fault tolerant external memory. The motivation which would allegedly induce the hypothetical person of ordinary skill to consider the teachings of Papenberg et al. is alleged to be that the fault tolerant memory is more reliable and thus less likely to cause a failure of the communication pathway.

It is submitted that this is insufficient to establish a *prima facie* case of obviousness and the burden to establish a *prima facie* case has not been met.

In rejecting claims under 35 U.S.C. §103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See *In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

A further problem resides in that there is nothing in Sakakura et al. which would suggest that there is a problem and that modification is necessary. Indeed, inasmuch as the Sakakura et al. arrangement must be considered to be adequate for its disclosed

purpose, there must be some disclosure of a shortcoming which is associated with this type of arrangement in the secondary reference to Papenberg et al. This, taken with the fact that, as noted above, the Sakakura et al. arrangement is not adapted to access external memories, the hypothetical person of ordinary skill would be left wanting for guidance as to why a modification of the Sakakura et al. arrangement should be considered let alone implemented.

It is respectfully submitted that the rejection of claim 10 under 35 USC § 103(a) as being unpatentable over Sakakura et al., Papenberg et al. and Kobayashi; and the rejection of claims 15-17 under 35 USC § 103(a) as being unpatentable over Sakakura et al., Papenberg et al. and Stirk et al. are rendered moot for at least the reasons that the basic combination of Sakakura et al. and Papenberg et al. would not lead the hypothetical person of ordinary skill to the claimed subject matter.

Allowable Subject Matter

The indication that claim 11 contains allowable subject matter is noted with appreciation. In light of this indication claim 11 has been placed in independent form.

Conclusion

It is submitted that the all of the pending claims are allowable over the art applied in this Office Action. Favorable reconsideration and the allowance of claim 11 along with the remaining claims which are pending in this application, are courteously solicited.

Respectfully submitted,

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By

Keith J. Townsend
Registration No. 40,358